Desktop Publishing
(DTP PUB)

4516

Desktop Publishing is a business course designed to allow students to develop proficiency in using desktop publishing software to create a variety of printed publications. Students will incorporate journalistic principles in design and layout of print and Web publications including integration of text and graphics and use of sophisticated hardware and software to develop and create quality materials for business-related tasks. Students will analyze the information and the audience and combine appropriate text, graphics, and design to communicate the desired message effectively. Planning and design principles are used to analyze and organize information, set up a design structure, and select or create appropriate visuals. Instructional strategies may include computer/technology applications, teacher demonstrations, collaborative instruction, interdisciplinary and /or culminating projects, problem-solving and critical thinking activities, simulations and project-based learning activities.

- Recommended Grade Level: 10-12
- Required Prerequisites: Digital Communication Tools and Computer Applications
- Credits: A one- or two-credit course over one or two semesters
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- A Career Academic Sequence, Career-Technical program, or Flex Credit course
- Course content standards/performance expectations and Indiana Academic Standards integrated at: http://www.doe.in.gov/octe/bme/curriculum/contentstandards.htm
- Teacher Requirements: http://doe.in.gov/dps/licensing/assignmentcode
- Career Clusters: This course may be included as a component for career pathways in all Indiana career clusters
- Career pathway information: http://www.doe.in.gov/octe/facs/CrrClstrGrid.html

Course Content Standards and Performance Expectations

DTP 1   Desktop Publishing Concepts

DTP 1.1   Content Standard: Students evaluate the purposes, functions and features of desktop publishing software

Performance Expectations
DTP 1.1.1   Define terms related to desktop publishing.
DTP 1.1.2   Describe the hardware components used in desktop publishing.
DTP 1.1.3   Compare and contrast software used for desktop publishing.
DTP 1.1.4   Identify tools in toolbars and palettes.
DTP 1.1.5   Demonstrate knowledge of measurement tools.
DTP 1.1.6   Discover effective color utilizations.
DTP 1.1.7   Explore Web features of desktop publishing software.

DTP 2   Software Application

DTP 2.1   Content Standard: Students develop and demonstrate desktop publishing
software skills.

Performance Expectations
DTP 2.1.1   Use editing techniques.
DTP 2.1.2   Access available resources for software assistance.
DTP 2.1.3   Modify document setup default.
DTP 2.1.4   Create master pages.
DTP 2.1.5   Apply knowledge of printing procedures.
DTP 2.1.6   Utilize pasteboard.
DTP 2.1.7   Modify templates.
DTP 2.1.8   Create templates.
DTP 2.1.9   Use special format features.
DTP 2.1.10   Use advanced special features.
DTP 2.1.11   Create and adjust text block attributes.
DTP 2.1.12   Apply layering techniques.
DTP 2.1.13   Demonstrate understanding of file formats.
DTP 2.1.14   Create and discuss sample publications both print and Web.
DTP 2.1.15   Incorporate database features in desktop publishing.

DTP 3   Enhancing Publication Content

DTP 3.1   Content Standard: Students import, manipulate and integrate data and graphic
images.

Performance Expectations
DTP 3.1.1   Incorporate text files and word processing documents into publications.
DTP 3.1.2   Insert graphics from various sources.
DTP 3.1.3   Utilize scanner and digital camera.
DTP 3.1.4   Use Optical Character Recognition software.
DTP 3.1.5   Generate text and graphic files.
DTP 3.1.6   Modify text and graphic files.
DTP 3.1.7   Export files.

DTP 4   Design and Layout

DTP 4.1   Content Standard: Students apply principles and techniques of publication design
and layout.

Performance Expectations
DTP 4.1.1   Determine the target audience and purpose of the publication.
DTP 4.1.2   Create an effective focal point.
DTP 4.1.3   Determine and adjust type attributes.
DTP 4.1.4   Determine and apply character and paragraph attributes.
DTP 4.1.5   Adjust or change color combinations.
DTP 4.1.6   Use white space effectively.
DTP 4.1.7   Evaluate readability and attractiveness of publication.
DTP 4.1.8   Incorporate proper design and layout in a complete publication.

DTP 5   Professionalism

DTP 5.1   Content Standard: Students demonstrate organizational and professional skills.

Performance Expectations
DTP 5.1.1   Explain and comply with copyright and licensing issues.
DTP 5.1.2   Discuss and incorporate ethical and legal standards.
DTP 5.1.3   Explore careers in desktop publishing.
DTP 5.1.4   Participate in a team project.
DTP 5.1.5   Prioritize project components.
DTP 5.1.6   Present an accurate and complete project to the end-user.

Indiana Academic Standards
Integrated into Desktop Publishing

English/Language Arts

Grade 10

Standard 1
READING: Word Recognition, Fluency, and Vocabulary Development
Vocabulary and Concept Development
10.1.1   Understand technical vocabulary in subject area reading.
10.1.2   Distinguish between what words mean literally and what they imply, and interpret what words imply.

Standard 2
READING: Comprehension (Focus on Informational Materials)
Structural Features of Informational and Technical Materials
10.2.1   Analyze the structure and format of various informational documents and explain how authors use the features to achieve their purposes.
Comprehension and Analysis of Grade-Level-Appropriate Text
10.2.3   Demonstrate use of sophisticated technology by following technical directions.
Expository (Informational) Critique
10.2.4   Evaluate an author's argument or defense of a claim by examining the relationship between generalizations and evidence, the comprehensiveness of evidence, and the way in which the author's intent affects the structure and tone of the text.

Standard 3
READING: Literary Response and Analysis
10.3.2   Compare and contrast the presentation of a similar theme or topic across genres (different types of writing) to explain how each genre shapes the author's presentation of the theme or topic.
Narrative Analysis of Grade-Level-Appropriate Text
10.3.5   Compare works that express a universal theme and provide evidence to support the views expressed in each work.
10.3.6   Evaluate an author's development of time and sequence, including the use of complex literary devices, such as foreshadowing (providing clues to future events) or flashbacks (interrupting the sequence of events to include information about an event that happened in the past).
10.3.8   Interpret and evaluate the impact of ambiguities, subtleties, contradictions, ironies, and inconsistencies in a text.
Literary Criticism
10.3.11 Evaluate the aesthetic qualities of style, including the impact of diction and figurative language on tone, mood, and theme.

Standard 4
WRITING: Process
10.4.1   Discuss ideas for writing with classmates, teachers, and other writers and develop drafts alone and collaboratively.
10.4.2   Establish a coherent thesis that conveys a clear perspective on the subject and maintain a consistent tone and focus throughout the piece of writing.
10.4.3   Use precise language, action verbs, sensory details, appropriate modifiers, and the active (*I will always remember my first trip to the city*) rather than the passive voice (*My first trip to the city will always be remembered*).

Research and Technology
10.4.4   Use clear research questions and suitable research methods, including texts, electronic resources, and personal interviews, to compile and present evidence from primary and secondary print or Internet sources.
10.4.5   Develop main ideas within the body of the composition through supporting evidence, such as scenarios, commonly held beliefs, hypotheses, and definitions.
10.4.7   Integrate quotations and citations into a written text while maintaining the flow of ideas.
10.4.8   Use appropriate conventions for documentation in text, notes, and bibliographies following the formats in different style manuals.
10.4.9   Use a computer to design and publish documents by using advanced publishing software and graphic programs.

Evaluation and Revision
10.4.10 Review, evaluate, revise, edit, and proofread writing using an editing checklist.
10.4.11 Apply criteria developed by self and others to evaluate the mechanics and content of writing.
10.4.12 Provide constructive criticism to other writers with suggestions for improving organization, tone, style, clarity, and focus; edit and revise in response to peer reviews of own work.

Standard 5
WRITING: Applications (Different Types of Writing and Their Characteristics)
10.5.1   Write biographical or autobiographical narratives or short stories that:
- describe a sequence of events and communicate the significance of the events to the audience.
- locate scenes and incidents in specific places.
- describe with specific details the sights, sounds, and smells of a scene and the specific actions, movements, gestures, and feelings of the characters; in the case of short stories or autobiographical narratives, use interior monologue (what the character says silently to self) to show the character's feelings.
- pace the presentation of actions to accommodate changes in time and mood.
10.5.3   Write expository compositions, including analytical essays and research reports that:
- gather evidence in support of a thesis (position on the topic), including information on all relevant perspectives.
- communicate information and ideas from primary and secondary sources accurately and coherently.
- make distinctions between the relative value and significance of specific data, facts, and ideas.
- use a variety of reference sources, including word, pictorial, audio, and Internet sources to locate information in support of a topic.
- include visual aids by using technology to organize and record information on charts, maps, and graphs.
- anticipate and address readers' potential misunderstandings, biases, and expectations.
- use technical terms and notations correctly.
10.5.4   Write persuasive compositions that:
- organize ideas and appeals in a sustained and effective fashion with the strongest emotional appeal first and the least powerful one last.
- use specific rhetorical (communication) devices to support assertions, such as appealing to logic through reasoning; appealing to emotion or ethical belief; or relating a personal anecdote, case study, or analogy.
- clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations, expressions of commonly accepted beliefs, and logical reasoning.
- address readers' concerns, counterclaims, biases, and expectations.

10.5.5   Write business letters that:
- provide clear and purposeful information and address the intended audience appropriately.
- show appropriate use of vocabulary, tone, and style that takes into account the intended audience's knowledge about and interest in the topic and the nature of the audience's relationship to the writer.
- emphasize main ideas or images.
- follow a conventional style with page formats, fonts (typeface), and spacing that contribute to the documents' readability and impact.

Example: Write a letter of support or of complaint in response to service that you received at a store or restaurant. Address the letter to the manager, including a clear account of the incident and requesting that he or she take appropriate action in response.

10.5.6   Write technical documents, such as a manual on rules of behavior for conflict resolution, procedures for conducting a meeting, or minutes of a meeting that:
- report information and express ideas logically and correctly.
- offer detailed and accurate specifications.
- include scenarios, definitions, and examples to aid comprehension.
- anticipate readers' problems, mistakes, and misunderstandings.

Example: Take notes while watching or listening to a physical therapist give instructions on the proper way to lift, carry, or move large objects. Incorporate these notes into a safety manual to be used in the classroom or in a job setting.

10.5.7   Use varied and expanded vocabulary, appropriate for specific forms and topics.

Example: Write a sentence for use in a formal letter of complaint: The thermostat is dangerously defective as it fails to maintain a safe temperature, and I am seeking a replacement or full refund.

10.5.8   Write for different purposes and audiences, adjusting tone, style, and voice as appropriate.

Standard 6
WRITING: English Language Conventions
Grammar and Mechanics of Writing
10.6.1   Identify and correctly use clauses, both main and subordinate; phrases, including gerund, infinitive, and participial; and the mechanics of punctuation, such as semicolons, colons, ellipses, and hyphens.
10.6.2   Demonstrate an understanding of sentence construction, including parallel structure, subordination, and the proper placement of modifiers, and proper English usage, including the use of consistent verb tenses.

Manuscript Form
10.6.3   Produce legible work that shows accurate spelling and correct use of the conventions of punctuation and capitalization.
10.6.4   Apply appropriate manuscript conventions — including title page presentation, pagination, spacing, and margins — and integration of source and support material by citing sources within the text, using direct quotations, and paraphrasing.

Standard 7
LISTENING AND SPEAKING: Skills, Strategies, and Applications
10.7.1   Summarize a speaker's purpose and point of view and ask questions concerning the speaker's content, delivery, and attitude toward the subject.
Organization and Delivery of Oral Communication
10.7.4   Use props, visual aids, graphs, and electronic media to enhance the appeal and accuracy of presentations.
10.7.6   Analyze the occasion and the interests of the audience and choose effective verbal and nonverbal techniques (including voice, gestures, and eye contact) for presentations.

Analysis and Evaluation of Oral and Media Communications
10.7.7   Make judgments about the ideas under discussion and support those judgments with convincing evidence.
10.7.8   Compare and contrast the ways in which media genres (including televised news, news magazines, documentaries, and online information) cover the same event.
10.7.10 Assess how language and delivery affect the mood and tone of the oral communication and make an impact on the audience.
10.7.11 Evaluate the clarity, quality, effectiveness, and general coherence of a speaker's important points, arguments, evidence, organization of ideas, delivery, choice of words, and use of language.
Speaking Applications
10.7.15 Deliver expository (informational) presentations that:
- provide evidence in support of a thesis and related claims, including information on all relevant perspectives.
- convey information and ideas from primary and secondary sources accurately and coherently.
- make distinctions between the relative value and significance of specific data, facts, and ideas.
- include visual aids by employing appropriate technology to organize and display information on charts, maps, and graphs.
- anticipate and address the listeners' potential misunderstandings, biases, and expectations.
- use technical terms and notations correctly.
10.7.19 Deliver descriptive presentations that:
- establish a clear point of view on the subject of the presentation.
- establish the relationship with the subject of the presentation (whether the presentation is made as an uninvolved observer or by someone who is personally involved).
- contain effective, factual descriptions of appearance, concrete images, shifting perspectives, and sensory details.

Grade 11

Standard 2
READING: Comprehension (Focus on Informational Materials)
Comprehension and Analysis of Grade-Level-Appropriate Text
11.2.2   Analyze the way in which clarity of meaning is affected by the patterns of organization, repetition of the main ideas, organization of language, and word choice in the text.
Expository (Informational) Critique
11.2.6   Critique the power, validity, and truthfulness of arguments set forth in public documents; their appeal to both friendly and hostile audiences; and the extent to which the arguments anticipate and address reader concerns and counterclaims.

Standard 4
WRITING: Process
Organization and Focus
11.4.1   Discuss ideas for writing with classmates, teachers, and other writers.
11.4.2   Demonstrate an understanding of the elements of discourse, such as purpose, speaker, audience, and form, when completing narrative, expository, persuasive, or descriptive writing assignments.
11.4.3   Use point of view, characterization, style, and related elements for specific narrative and aesthetic (artistic) purposes.
11.4.4   Structure ideas and arguments in a sustained and persuasive way and support them with precise and relevant examples.

11.4.5 Enhance meaning using rhetorical devices, including the extended use of parallelism, repetition, and analogy and the issuance of a call for action.
11.4.6 Use language in creative and vivid ways to establish a specific tone.
Evaluation and Revision
11.4.10 Review, evaluate, and revise writing for meaning, clarity, achievement of purpose, and mechanics.
11.4.11 Edit and proofread one's own writing, as well as that of others, using an editing checklist.
11.4.12 Revise text to highlight the individual voice, improve sentence variety and style, and enhance subtlety of meaning and tone in ways that are consistent with the purpose, audience, and form of writing.

Standard 5
WRITING: Applications (Different Types of Writing and Their Characteristics)
11.5.1 Write fictional, autobiographical, or biographical narratives that:
- narrate a sequence of events and communicate their significance to the audience.
- locate scenes and incidents in specific places.
- describe with specific details the sights, sounds, and smells of a scene and the specific actions, movements, gestures, and feelings of the characters; in the case of autobiography or fiction, use interior monologue (what the character says silently to self) to show the character's feelings.
- pace the presentation of actions to accommodate changes in time and mood.
11.5.5 Write job applications and résumés that:
- provide clear and purposeful information and address the intended audience appropriately.
- use varied levels, patterns, and types of language to achieve intended effects and aid comprehension.
- modify the tone to fit the purpose and audience.
- follow the conventional style for that type of document (a résumé or cover letter of application) and use page formats, fonts (typeface), and spacing that contribute to the readability and impact of the document.
11.5.6 Use varied and extended vocabulary, appropriate for specific forms and topics.
11.5.7 Use precise technical or scientific language when appropriate for topic and audience.
11.5.8 Deliver multimedia presentations that:
- combine text, images, and sound and draw information from many sources, including television broadcasts, videos, films, newspapers, magazines, CD-ROMs, the Internet, and electronic media-generated images.
- select an appropriate medium for each element of the presentation.
- use the selected media skillfully, editing appropriately, and monitoring for quality.
- test the audience's response and revise the presentation accordingly.

Standard 6
WRITING: English Language Conventions
11.6.1 Demonstrate control of grammar, diction, paragraph and sentence structure, and an understanding of English usage.
11.6.2 Produce writing that shows accurate spelling and correct punctuation and capitalization.
11.6.3 Apply appropriate manuscript conventions in writing — including title page presentation, pagination, spacing, and margins — and integration of source and support material by citing sources within the text, using direct quotations, and paraphrasing.

Standard 7
LISTENING AND SPEAKING: Skills, Strategies, and Applications
Comprehension
11.7.1 Summarize a speaker's purpose and point of view and ask questions to draw interpretations of the speaker's content and attitude toward the subject.
11.7.4 Use logical, ethical, and emotional appeals that enhance a specific tone and purpose.
11.7.5 Use appropriate rehearsal strategies to pay attention to performance details, achieve command of the text, and create skillful artistic staging.
11.7.6 Use effective and interesting language, including informal expressions for effect, Standard English for clarity, and technical language for specificity.
11.7.8 Evaluate when to use different kinds of effects (including visuals, music, sound, and graphics) to create effective productions.
Analysis and Evaluation of Oral and Media Communications
11.7.9 Analyze strategies used by the media to inform, persuade, entertain, and transmit culture (including advertising; perpetuating of stereotypes; and using visual representations, special effects, and language).
11.7.11 Interpret and evaluate the various ways in which events are presented and information is communicated by visual image-makers (such as graphic artists, documentary filmmakers, illustrators, and news photographers).
11.7.12 Critique a speaker's use of words and language in relation to the purpose of an oral communication and the impact the words may have on the audience.
11.7.15 Analyze the techniques used in media messages for a particular audience and evaluate their effectiveness (for example, Orson Welles' radio broadcast *War of the Worlds*).
11.7.19 Deliver multimedia presentations that:
- combine text, images, and sound by incorporating information from a wide range of media, including films, newspapers, magazines, CD-ROMs, online information, television, videos, and electronic media-generated images.
- select an appropriate medium for each element of the presentation.
- use the selected media skillfully, editing appropriately and monitoring for quality.
- test the audience's response and revise the presentation accordingly.

Grade 12

Standard 2
READING: Comprehension (Focus on Informational Materials)
Comprehension and Analysis of Grade-Level-Appropriate Text
12.2.2 Analyze the way in which clarity of meaning is affected by the patterns of organization, repetition of the main ideas, organization of language, and word choice in the text.
Expository (Informational) Critique
12.2.6 Critique the power, validity, and truthfulness of arguments set forth in public documents; their appeal to both friendly and hostile audiences; and the extent to which the arguments anticipate and address reader concerns and counterclaims.

Standard 4
WRITING: Process
Organization and Focus
12.4.1 Engage in conversations with peers and the teacher to plan writing, to evaluate how well writing achieves its purposes, and to explain personal reaction to the task.
12.4.2 Demonstrate an understanding of the elements of discourse, such as purpose, speaker, audience, and form, when completing narrative, expository, persuasive, or descriptive writing assignments.
12.4.3 Use point of view, characterization, style, and related elements for specific narrative and aesthetic (artistic) purposes.

12.4.4 Structure ideas and arguments in a sustained and persuasive way and support them with precise and relevant examples.

12.4.5 Enhance meaning using rhetorical devices, including the extended use of parallelism, repetition, and analogy and the issuance of a call for action.

12.4.6 Use language in creative and vivid ways to establish a specific tone.

Research and Technology

12.4.9 Use technology for all aspects of creating, revising, editing, and publishing.

Evaluation and Revision

12.4.10 Accumulate, review, and evaluate written work to determine its strengths and weaknesses and to set goals as a writer.

12.4.11 Revise, edit, and proofread one's own writing, as well as that of others, using an editing checklist.

12.4.12 Further develop unique writing style and voice, improve sentence variety, and enhance subtlety of meaning and tone in ways that are consistent with the purpose, audience, and form of writing.

Standard 5

WRITING: Applications (Different Types of Writing and Their Characteristics)

12.5.1 Write fictional, autobiographical, or biographical narratives that:
- narrate a sequence of events and communicate their significance to the audience.
- locate scenes and incidents in specific places.
- describe with specific details the sights, sounds, and smells of a scene and the specific actions, movements, gestures, and feelings of the characters; in the case of autobiography or fiction, use interior monologue (what the character says silently to self) to show the character's feelings.
- pace the presentation of actions to accommodate changes in time and mood.

12.5.2 Write responses to literature that:
- demonstrate a comprehensive understanding of the significant ideas in works or passages.
- analyze the use of imagery, language, universal themes, and unique aspects of the text.
- support important ideas and viewpoints through accurate and detailed references to the text and to other works.
- demonstrate an understanding of the author's style and an appreciation of the effects created.
- identify and assess the impact of perceived ambiguities, nuances, and complexities within the text.

12.5.6 Use varied and extended vocabulary, appropriate for specific forms and topics.

12.5.7 Use precise technical or scientific language when appropriate for topic and audience.

12.5.8 Deliver multimedia presentations that:
- combine text, images, and sound and draw information from many sources, including television broadcasts, videos, films, newspapers, magazines, CD-ROMs, the Internet, and electronic media-generated images.
- select an appropriate medium for each element of the presentation.
- use the selected media skillfully, editing appropriately, and monitoring for quality.
- test the audience's response and revise the presentation accordingly.

Standard 6

WRITING: English Language Conventions

12.6.1 Demonstrate control of grammar, diction, and paragraph and sentence structure, as well as an understanding of English usage.

12.6.2 Produce writing that shows accurate spelling and correct punctuation and capitalization.

12.6.3   Apply appropriate manuscript conventions in writing — including title page presentation, pagination, spacing, and margins — and integration of source and support material by citing sources within the text, using direct quotations, and paraphrasing.

Standard 7
LISTENING AND SPEAKING: Skills, Strategies, and Applications
12.7.1   Summarize a speaker's purpose and point of view, discuss, and ask questions to draw interpretations of the speaker's content and attitude toward the subject.
Organization and Delivery of Oral Communication
12.7.4   Use logical, ethical, and emotional appeals that enhance a specific tone and purpose.
12.7.5   Use appropriate rehearsal strategies to pay attention to performance details, achieve command of the text, and create skillful artistic staging.
12.7.6   Use effective and interesting language, including informal expressions for effect, Standard English for clarity, and technical language for specificity.
12.7.8   Evaluate when to use different kinds of effects (including visuals, music, sound, and graphics) to create effective productions.
Analysis and Evaluation of Oral and Media Communications
12.7.9   Analyze strategies used by the media to inform, persuade, entertain, and transmit culture (including advertising; perpetuating stereotypes; and using visual representations, special effects, and language).
12.7.11 Interpret and evaluate the various ways in which events are presented and information is communicated by visual image-makers (such as graphic artists, documentary filmmakers, illustrators, and news photographers).
12.7.12 Critique a speaker's use of words and language in relation to the purpose of an oral communication and the impact the words may have on the audience.
12.7.15 Analyze the techniques used in media messages for a particular audience to evaluate effectiveness, and infer the speaker's character (using, for example, the Duke of Windsor's abdication speech).
Speaking Applications
12.7.19 Deliver multimedia presentations that:
- combine text, images, and sound by incorporating information from a wide range of media, including films, newspapers, magazines, CD-ROMs, online information, television, videos, and electronic media-generated images.
- select an appropriate medium for each element of the presentation.
- use the selected media skillfully, editing appropriately, and monitoring for quality.
- test the audience's response and revise the presentation accordingly.

Algebra I

Standard 2
Linear Equations and Inequalities
A1.2.1   Solve linear equations.
A1.2.2   Solve equations and formulas for a specified variable.
A1.2.6   Solve word problems that involve linear equations, formulas, and inequalities.

Standard 3
Relations and Functions
A1.3.1   Sketch a reasonable graph for a given relationship.

Standard 9
Mathematical Reasoning and Problem Solving
A1.9.1   Use a variety of problem-solving strategies, such as drawing a diagram, making a chart, guess-and-check, solving a simpler problem, writing an equation, and working backwards.
A1.9.2   Decide whether a solution is reasonable in the context of the original situation.
A1.9.6   Distinguish between inductive and deductive reasoning, identifying and providing examples of each.

Algebra II

Standard 6
Algebraic Fractions
A2.6.2   Add, subtract, multiply, divide, and simplify algebraic fractions.
A2.6.5   Solve word problems involving fractional equations.

Probability and Statistics

Standard 1
Descriptive Statistics
PS.1.1   Create, compare, and evaluate different graphic displays of the same data, using histograms, frequency polygons, cumulative distribution functions, pie charts, scatterplots, stem-and-leaf plots, and box-and-whisker plots. Draw these by hand or use a computer spreadsheet program.

Standard 2
Probability
PS.2.1   Understand the counting principle, permutations, and combinations and use them to solve problems.

Discrete Mathematics

Standard 1
Counting Techniques
DM.1.2   Use the fundamental counting principle to find the number of outcomes in a problem situation.
DM.1.3   Use combinatorial reasoning to solve problems.